

Research Problem Review 76-4

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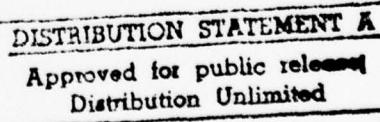
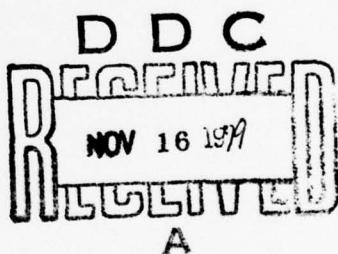
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PREDICTING MILITARY DELINQUENCY

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August 1976

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FOR THE BEHAVIORAL AND SOCIAL SCIENCES**
**A Field Operating Agency under the Jurisdiction of the
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Army Project Number
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Career Effectiveness in
the Contemporary Army
DAHC 19-73-C-0036

Research Problem Review 76-4

⑥ PREDICTING MILITARY DELINQUENCY

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INDIVIDUAL TRAINING AND SKILL EVALUATION TECHNICAL AREA
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⑭ ARI-RES PROBLEM REV-76-4

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bearing on specific management problems. A limited distribution is made--
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FOREWORD

The Army Research Institute for the Behavioral and Social Sciences (ARI) is concerned both with systematic research over wide areas and with immediate specific problems, in this case continuing to seek the underlying causes of military delinquency and develop instruments to screen recruits for potential military delinquents--problems previously addressed by ARI's Retention Standards Task and Selection and Behavioral Evaluation Project, Military Selection Research Division.

With every change in induction standards since the end of World War II, questions concerning the effects on the Army's enlisted personnel system have been addressed by ARI's continuing program on selection, classification, management, and utilization of Army personnel. In response to a requirement from the Deputy Chief of Staff of the Army (DCSPER), part of the research focused on early identification of soldiers likely to become discipline problems. ARI Research Report 1185 summarized ARI research on military discipline and delinquency to early 1975. This is one of two Research Problem Reviews which discuss a broadly based recent effort (briefly summarized in Research Report 1185) designed to assess a variety of social-psychological predictors of delinquency and integrate them in relation to discipline problems in the Army.

Research was conducted under Army RDTE Project 2Q162108A740, "Institutional Change," FY 1974 Work Program, and is responsive to special requirements of the Leadership and Motivation Division of DCSPER. Research at ARI is conducted as an in-house effort augmented by contracts with organizations selected for their unique capabilities in the area; the present study was done jointly by personnel of ARI and the Bendix Applied Sciences Division, Ann Arbor, Michigan.

J. E. Uhlancer

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PREDICTING MILITARY DELINQUENCY

BRIEF

Requirement:

To assess the usefulness of a variety of social-psychological factors as possible predictors of military delinquency, to increase the predictability or reduce the frequency of discipline problems in the Army.

were assessed

Procedure:

Data were collected by an anonymous self-administered questionnaire from a sample of 1,564 enlisted men stationed in the continental U.S., Alaska, and West Germany during 1973 and 1974 and selected to reflect the diverse composition of the Army.

Respondents were asked a number of questions concerning their attitudes toward authority figures and perceptions of military life as well as standard social background such as education, relations with parents, and race. They were also asked how many times military authorities had charged them with being absent without leave (AWOL) or other offenses. The data from their answers were clustered into three sets of predictors dealing with social background, personality, and military environment and three indices of delinquency--AWOL, resistance to authority, and general delinquency--to be analyzed for significant relationships.

Findings:

In the sample studied, the social background variables of preservice delinquency, school expulsions, civilian arrests, and difficulty in holding a job were most predictive of self-reported AWOL, accounting for 16.6% of the variance. The same variables of preservice delinquency, school expulsions, and civilian arrests were most predictive of resistance to authority, while preservice delinquency and civilian arrests were the only significant predictors of general delinquency.

Utilization of Findings:

While the present research confirms that individual preservice characteristics such as civilian delinquency do correlate with delinquency in the Army, the predictive utility of screening and selection on such characteristics appears to be questionable. Alternative strategies for reducing military delinquency such as, for example, insuring that the training soldiers receive will be directly related to their jobs, making the work of soldiers more challenging, or improving housing and recreational facilities appear to have better potential results.

PREDICTING MILITARY DELINQUENCY

CONTENTS

	Page
PREDICTION MEASURES	2
The Criterion Measures	2
The Predictor Measures	5
RESULTS	9
Predicting AWOL	9
Predicting Resistance to Authority	9
Predicting General Delinquency	14
DISCUSSION	14
REFERENCES	17

TABLES

Table 1. Responses concerning individual military delinquency offenses	3
2. Factor loadings from normalized varimax rotation of the two-dimensional solution	4
3. Correlations among the military delinquency indices	5
4. Descriptive statistics for predictor measures and criteria of individual military delinquency	7
5. Correlations of predictor variables with military delinquency criteria	8
6. Results of analytical procedures for predicting AWOL	10
7. Regression model for predicting AWOL	11

	Page
TABLES (continued)	
Table 8. Results of analytical procedures for predicting resistance to authority	12
9. Regression model for predicting resistance to military authority	13
10. Results of analytical procedures for predicting general delinquency	15
11. Regression model for predicting general delinquency	16

PREDICTING MILITARY DELINQUENCY

Most investigations into the etiology of military delinquency during the past twenty or more years have focused on the relationship between acts of individual delinquency and characteristics that individuals bring with them into the military. The underlying rationale of these investigations has been the point of view, appealing from a policy perspective, that if certain social background or personality characteristics could be found to be associated with subsequent delinquent acts then individuals possessing those attributes could be screened out before entering the military. The cost-effectiveness of such an outcome is obvious. The approach assumes, however, that acts of military delinquency (or deviant behavior in general) are rooted in individual characteristics instead of in social structural phenomena that an individual may encounter after entering the military.

A plethora of investigations¹ have documented that while the delinquent behavior of military personnel is indeed correlated with certain

¹ See for example:

Berbiglia, J. C. The AWOL Syndrome: A study in the early identification of potential AWOLs by the use of the Taylor-Johnson Temperament Analysis leading to the development of a preventive program. Los Angeles: Psychological Publications, 1971.

Christie, R., et al. An exploratory study of factors affecting transition to Army life. ARI Technical Research Note 13, January 1952.

Drucker, E. H., and Schwartz, E. H. The prediction of AWOL, military skills and leadership potential. HumRRO (Tech. Rep. 73-1). Alexandria, Va.: Human Resources Research Organization, January 1973.

Fras, L. A., and Fox, L. J. The Taylor-Johnson Temperament Analysis "AWOL Syndrome": A further evaluation (Technical report to the Commander). Fort Riley, Kans.: U.S. Army Correctional Training Facility, May 1972.

Ginzburg, E., et al. The ineffective soldier. New York: Columbia University Press, 1959.

Gordon, L. V. Manual for the survey of interpersonal values. Chicago: Science Research Associates, 1960.

Gough, H. G. Systematic validation of a test for delinquency. American Psychologist, 1954, 9, 8-18.

Hauser, W. L. America's Army in crisis: A study in civil-military relations. Baltimore: Johns Hopkins University Press, 1973.

Knapp, R. Value and personality differences between offenders and non-offenders. Journal of Applied Psychology, 1964, 48, 59-62.

Kristiansen, D. M., and Larson, E. F. Development of a Background and Opinion Questionnaire for predicting military delinquency. ARI Research Memorandum 67-3. October 1967.

Lang, K. Military Organizations. In J. G. March (Ed.), Handbook of Organizations. Chicago: Rand McNally, 1965.

McCubbin, H. I., et al. Leadership and situational factors related to AWOL: A research report. Fort Riley, Kans.: U.S. Army Correctional Training Facility, 1971.

Osburn, H. G., Brown, C., Chreitzberg, J., Hield, W., Seidel, E., and Watson, D. A preliminary investigation of delinquency in the Army. HumRRO Technical Report 5. Alexandria, Va.: Human Resources Research Organization, April 1954. AD-29 029.

Plag, J. A. The practical value of a psychiatric screening interview in predicting military ineffectiveness. San Diego: Navy Medical Neuropsychiatric Research Unit, April 1964.

Quay, H. C., and Peterson, D. R. The questionnaire measurement of personality dimensions associated with juvenile delinquency. Unpublished manuscript, 1964.

Ryan, F. J. Relation of performance to social background factors among Army inductees. Washington, D.C.: Catholic University Press, 1958.

social background and personality characteristics, the selection or screening of individuals on the basis of these characteristics would be extremely costly because of the large number of "false positives" that would be identified as potential delinquents. Nonetheless, the present investigation tried to replicate some of these earlier efforts within the context of the Army of the 1970's.

Further, this investigation sought to assess the relative importance of several broad classes of variables (social background, personality, and social structural) that might be predictive of delinquent behavior among a sample of military personnel.

PREDICTION MEASURES

The measures of military delinquency developed for this inquiry were based on data collected by an anonymous, self-administered questionnaire from a sample of 1,564 enlisted men stationed in the continental U.S., Alaska, and West Germany during 1973 and 1974. While the sample was selected so as to reflect the composition of the U.S. Army--whites and non-whites; enlisted men and noncommissioned officers; men in training units and men in combat and combat support units--the sample is not completely representative.

The respondents were asked to indicate the number of times they had been charged by military authorities with committing various offenses, including absence without leave (AWOL), insubordination, refusal to follow orders, illicit drug use, drunkenness, destruction of property, theft, and assault with or without a weapon. Since the respondents were asked to state the total number of times they had been charged with these offenses during their Army careers, these data may not necessarily reflect the respondents' current tendencies to commit the same offenses.

Similarly, the reliance on self-report information about criminal behavior is open to question. While the information supplied by these respondents may not be entirely correct, the fact that the number of responses on how often a man had been charged by authorities with offenses was smaller than responses on how often he had committed each offense suggests that the data are reasonably accurate. The smaller set of responses was used, to be conservative, in the analysis of the data.

THE CRITERION MEASURES

The responses of the men in this sample to the individual military delinquency items are presented in Table 1. Because of the extreme skewness of the response distributions to the items certain analytical problems had to be addressed. For example, only for the case of AWOL did as many as 20% of the respondents report having been charged with this offense at least once. Since analysis of such data would probably result in very small numbers of cases being designated as having been

charged with committing delinquent actions, it was decided to aggregate the individual delinquency measures using nonmetric factor analysis.

Table 1
RESPONSES CONCERNING INDIVIDUAL MILITARY
DELINQUENCY OFFENSES

Offense	Percent of Men Reporting That They Committed the Offense at Least Once ^a	N
AWOL	21.3	1428
Resistance to Authority		1367
Refusal to follow orders	10.9	
Insubordination	5.7	
Drug possession/use	6.7	
General Delinquency		1355
Assault without a weapon	4.7	
Drunk and disorderly	6.2	
Drunk driving	3.9	
Destruction of property	3.7	
Theft	3.9	
Assault with a weapon	3.3	

^apercentages are based on the number of complete cases out of a total of 1564 respondents.

Nonmetric factor analysis is a special case of multidimensional scaling developed by Shepard² and Kruskall.³ The primary purpose of multidimensional scaling, as opposed to the traditional factor analytic method, is to provide the scientist with a parsimonious model of the interrelationships between data elements that can be visualized because it is confined to two or at most three spatial dimensions.⁴

The nonmetric factor analysis indicated two major clusters of reported military offenses: A loose cluster of three items dealing with resistance to authority (refusal to follow orders, insubordination, and possession or use of drugs), and another loose cluster of all other offenses except AWOL. The number of times the respondent reported having been charged with AWOL was analyzed separately. The factor loadings from the normalized varimax rotation of the two-dimensional solution are presented in Table 2.

Table 2
FACTOR LOADINGS FROM NORMALIZED VARIMAX ROTATION
OF THE TWO-DIMENSIONAL SOLUTION

Variable	Loading on Factor I ^a	Loading on Factor II ^b	Communality
AWOL	.053	.422	.181
Refusal to Follow Orders	.393	.703	.649
Insubordination	.453	.567	.527
Drug Possession/Use	.276	.543	.371
Assault without a weapon	.636	.261	.472
Drunk and disorderly	.610	.216	.419
Drunk driving	.694	.148	.503
Destruction of property	.838	.032	.704
Stealing	.684	.184	.502
Assault with a weapon	.551	.286	.386

^aFactor I accounted for approximately 29% of the variance.

^bFactor II accounted for 14% of the variance.

² Shepard, R. N. The analysis of proximities: Multidimensional scaling with an unknown distance function.
I. Psychometrika, 1962, 27, 125-140.

³ Kruskal, J. B. Nonmetric multidimensional scaling: A numerical method. Psychometrika, 1964, 29, 115-129.

⁴ For a more detailed review of multidimensional scaling and nonmetric factor analysis the reader is referred to Multidimensional Scaling: Theory and Applications in the Behavioral Sciences, edited by Roger Shepard, A. K. Romney, and Sara B. Nerlove (Seminar Press, 1972).

On the basis of this analysis, three indices of military delinquency were constructed: AWOL, Resistance to Military Authority, and General Delinquency. Construction of these indices involved dichotomizing responses to the individual delinquency items, coding these responses as "one" or "zero" depending on whether or not the individual reported being charged with the offense at least once, and taking the sum of the individual item scores.

Since only a small number of respondents in the total sample indicated they had been charged with any of the offenses, it was not possible to explore differences in the factor configurations between sub-elements of the sample (i.e., between whites and non-whites; between combat and support troops).

The correlations among the three indices of military delinquency are presented in Table 3. The three indices are treated as conceptually separate for purposes of this analysis.

Table 3

CORRELATIONS AMONG THE MILITARY DELINQUENCY INDICES

	AWOL	Resistance	General
AWOL	1.000		
Resistance	.362	1.000	
General	.208	.400	1.000

Note. Pearson-moment correlations; 1327 complete cases. All correlations are significant at the .01 level.

THE PREDICTOR MEASURES

The predictor measures of military delinquency were arbitrarily grouped, on an a priori basis, into three broad classes. One class of measures dealt with the social background characteristics of the sample prior to entry into the Army--for example, reported pre-service delinquent behavior, education, pre-service arrests and convictions, school expulsions and suspensions, socio-economic status, as well as measures of the respondent's difficulties in holding a civilian job. The second class of measures dealt with a broad set of personality-related measures--

measures of the individual's relations with authority figures,⁵ concern for status,⁶ and social responsibility.⁷ The third class of measures dealt with the individual's perceptions of his military environment--for example, his expressed satisfaction with his job in the Army, his satisfaction with living quarters, and his perceptions of racial discrimination in the Army.⁸

Descriptive statistics for each of the predictor measures and criteria are presented in Table 4.

The first two sets of predictors measured individual respondent characteristics that could conceivably be used for initial selection or screening purposes since these selection variables are under the control of the Army. The personality measures were regarded as separate from the social background measures, if personality is a function of the social background, then addition of personality measures might not improve the reliability or validity of a screening process based on data from the relevant social background measures. On the other hand, the personality measures might make a contribution to the prediction of military delinquency. The third set of predictor measures, social-structural or environmental phenomena, were selected to represent areas which the Army can change or modify if the measures can be shown to affect military delinquency.

Because of the large number of predictor variables, the analyses (stepwise regressions) were carried out in stages for each of the three criteria of military delinquency. First, regression analyses of the criterion indices, utilizing the predictors within each of the three classes of predictor measures, were carried out separately in order to determine which of the 78 predictor measures were significantly related (Table 5). In the second stage the best predictor measures from among each of the first two classes of predictors (social background and personality) were combined to determine whether the personality measures could predict a significant amount of the variance of the criterion that was not explained by the social background measures alone. Following this, all of the predictor measures from the second stage, regardless of whether they contributed significantly to the regression at that stage, were then included in a regression in which those environmental measures found to be associated with the criterion (from the first stage) were

⁵ Berkowitz, N. H., and Wolkon, G. H. A forced choice form of the F Scale free of acquiescent response set. Sociometry, 1964, 27.

⁶ Kaufman, W. C. Status, authoritarianism and anti-semitism. American Journal of Sociology, 1957, 62, 359-382.

⁷ Berkowitz, L., and Luterman, K. The traditionally socially responsible personality. Public Opinion Quarterly, 1958, 32, 169-185.

⁸ Bauer, R. G., Stout, R. L., and Holz, R. F. Measures of military attitudes. ARI Technical Paper, in preparation.

Table 4

DESCRIPTIVE STATISTICS FOR PREDICTOR MEASURES AND CRITERIA
OF INDIVIDUAL MILITARY DELINQUENCY

Variable Class	Variable	N ^a	\bar{X}	SD	Range
<u>Social Background Predictor</u>	Pre-Service Delinquency (Minor)	1540	3.12	1.09	1-5
	Pre-Service Delinquency (Major)	1531	2.02	1.04	1-5
	Education	1543	3.15	.81	1-6
	Lived with Parents	-	-	-	-
	Participation in Group Sports	1438	2.73	1.18	1-4
	Participation in Team Sports	1466	3.10	1.12	1-4
	Pre-Service Arrests	1511	1.91	1.29	1-5
	Pre-Service Convictions	1505	1.33	.79	1-5
	School Suspensions	1510	1.89	1.28	1-5
	School Expulsions	1510	1.49	1.03	1-5
	Parents' Socio-Economic Status	1451	0.00	.73	-1.85-2.05
	Broken Home	1389	1.21	.41	1-2
	Family Relations Scale	1549	0.00	.56	-2.20-1.09
	School Relations Scale	1536	2.73	1.15	1-4
	Job Relations Scale	1420	3.28	.63	1-4
	Marital Status	1554	1.41	.49	1-2
<u>Personality Predictor</u>	Acceptance of Authority Scale	1539	3.67	1.17	1-6
	Status Concern Scale	1537	3.65	1.03	1-6
	Social Responsibility Scale	1552	4.86	1.09	1-6
<u>Environment Predictor</u>	Quality of Living Quarters	1534	2.71	1.49	1-5
	Sexual Satisfaction	1513	2.78	1.59	1-5
	Financial Problems	1446	2.52	1.33	1-5
	Military Work Role Scale	1557	2.93	.97	1-5
	General Racial Discrimination	1521	3.28	1.23	1-6
	Unit Racial Discrimination	1535	0.00	.68	-1.01-1.95
	Recreational Availability	1548	3.09	.76	1-5
<u>Criterion</u>	AWOL	1428	1.37	.79	1-4
	Resistance to Authority Index	1367	1.08	.20	1-2
	General Delinquency Index	1355	1.03	.11	1-2

^a Number of complete cases out of 1564.

Table 5

CORRELATIONS OF PREDICTOR VARIABLES WITH MILITARY DELINQUENCY CRITERIA

Class of Predictor	Predictor Variables	Criteria		
		AWOL	Resistance	General
<u>Social Background</u>	Pre-Service Delinquency (Minor)	.186**	.200**	.137**
	Pre-Service Delinquency (Major)	.266**	.205**	.243**
	Education	-.114**	-.012	-.058
	Lived with Parents	.006	.014	-.006
	Participation in Group Sports	-.044	-.011	.022
	Participation in Team Sports	-.024	.068*	.017
	Pre-Service Arrests	.257*	.186**	.233**
	Pre-Service Convictions	.180**	.080*	.156*
	School Suspensions	.225**	.208**	.152**
	School Expulsions	.226**	.180**	.172**
	Parents' Socio-Economic Status	-.016	.061	.035
	Broken Home	.119**	.049	.041
	Family Relations Scale	-.047	-.080*	-.060
	School Relations Scale	-.084*	-.103**	-.104**
	Job Relations Scale	-.183**	-.094**	-.111**
	Marital Status	-.049	-.109**	-.032
<u>Personality</u>	Acceptance of Authority Scale	-.087*	-.172**	-.004
	Status Concern Scale	.062	-.017	.025
	Social Responsibility Scale	-.100**	-.166**	-.074*
<u>Environment</u>	Quality of Living Quarters	-.073*	-.140**	-.058
	Sexual Satisfaction	.001	.024	-.033
	Financial Problems	.168**	.147**	.031
	Military Work Role Scale	-.191**	-.182**	-.050
	General Racial Discrimination	.160**	.112**	.028
	Unit Racial Discrimination	.159**	.121**	.089**
	Recreational Availability	-.014**	-.109**	-.091**

* p < .05

** p < .01

added to the regression equation. Finally, a regression model was constructed that included all those measures having statistically significant partial correlations with the criterion.

RESULTS

PREDICTING AWOL

The results of the analytical procedures are presented in Table 6, and the regression model for predicting AWOL in Table 7. Table 6 indicates that a profile of the AWOL offender could be constructed on the basis of the pre-service delinquency record, number of civilian arrests, school expulsions (non-high school graduate), civilian work history, and parents' marital status when he entered the Army. While these social background measures are statistically related to subsequent AWOL behavior, they account for less than 17% of the explained variance of AWOL.

Personality measures are related to AWOL behavior but they explain such a small portion of the variance as to be practically useless for screening or selection.

Environmental measures alone account for only 7% of the explained variance of AWOL. Satisfaction with one's job in the Army, the existence of financial problems, and the perception of racial discrimination do relate to reported AWOL behavior.

The regression model for predicting AWOL (Table 7) indicates that all three classes of predictor measures are associated with reported AWOL behavior, although no one measure appears to be crucial. Clearly, many disparate reasons affect the decision of soldiers to go AWOL. The prominence of the military work role measure, however, suggests that the Army's efforts to improve the individual soldier's day-to-day job satisfaction might well reduce AWOL behavior.

PREDICTING RESISTANCE TO AUTHORITY

Measures related to social background and personality and to the Army environment are all somewhat related to the reported tendency of soldiers to resist military authority (Tables 8 and 9). Again, as with AWOL, no single measure contributed dramatically to the final prediction model. The social background measure of prior civilian arrests is the best single predictor of resistance to authority (using "best" in the sense of providing reasonably parsimonious sets of predictors which can account for most of the predictable variance in the criteria measures). Even this measure reflects a partial correlation of only .160 (Table 9), not enough to be valuable for screening or selection purposes.

Table 6
RESULTS OF ANALYTICAL PROCEDURES FOR PREDICTING AWOL

<u>Stage 1:</u>	<u>Stage 2:</u>	<u>Stage 3:</u>
Background Variables: N ^a = 977	Contribution of personality variables to the regression on background variables: N ^a = 1114	
Statistically Significant Predictors: ^b	Statistically Significant Predictors: ^b	
Job Relations Scale	Civilian Arrests	
Major Pre-Service Delinquency	Major Pre-Service Delinquency	
Civilian Arrests	School Expulsions	
School Expulsions	Status Concern Scale	
Broken Home	Job Relations Scale	
Percentage of Variance Accounted for: 16.6%	Percentage of Variance Accounted for: 12.4%	
Multiple Correlation: .407	Multiple Correlation: .352	
Personality Variables: N ^a = 1502	Contribution of environmental variables to the regression on background and personality variables: N ^a = 1013	
Statistically Significant Predictors: ^b	Statistically Significant Predictors: ^b	
Status Concern Scale	Civilian Arrests	
Social Responsibility Scale	Work Role Scale	
Acceptance of Authority Scale	Financial Problems	
Percentage of Variance Accounted for: 2.6%	School Expulsions	
Multiple Correlation: .162	General Racial Discrimination Scale	
Environmental Variables: N ^a = 1157	Major Pre-Service Delinquency	
Statistically Significant Predictors: ^b	Broken Home	
Work Role Scale	Status Concern Scale	
Financial Problems	Percentage of Variance Accounted for: 15.3%	
General Racial Discrimination Scale	Multiple Correlation: .391	
Percentage of Variance Accounted for: 7.0%		
Multiple Correlation: .265		

^a Respondents included at each stage were those with complete data for all variables.

^b Listed in order of their contribution to predicting AWOL.

Table 7

REGRESSION MODEL FOR PREDICTING AWOL
(N = 1114)

Predictor Ranking	Variable	Partial Correlation
1	Military Work Role	-.142
2	School Expulsions	.124
3	Pre-Service Arrests	.120
4	Financial Problems	.101
5	Broken Home	.090
6	Major Pre-Service Delinquency	.085
7	General Racial Discrimination	.080
8	Status Concern Scale	.061

Note. Multiple Correlation .405; Explained variance 16.4%.

Table 8

RESULTS OF ANALYTICAL PROCEDURES FOR PREDICTING RESISTANCE TO AUTHORITY

<u>Stage 1:</u> Background Variables:	<u>Stage 2:</u> Contribution of the personality variables to the regression on background variables: N ^a = 1248
Statistically Significant Predictors: ^b	Statistically Significant Predictors: ^b
Civilian Arrests	Civilian Arrests
Participation in Team Sports	School Expulsions
School Expulsions	Social Responsibility Scale
Percentage of Variance Accounted for:	Acceptance of Authority Scale
8.3%	Participation in Team Sports
Multiple Correlation: .289	Percentage of Variance Accounted for: 9.9%
Personality Variables:	Multiple Correlation: .315
N ^a = 1202	
Statistically Significant Predictors: ^b	
Social Responsibility Scale	Statistically Significant Predictors: ^b
Acceptance of Authority Scale	Civilian Arrests
Status Concern Scale	School Expulsions
Percentage of Variance Accounted for:	Satisfaction with Living Quarters
4.8%	Participation in Team Sports
Multiple Correlation: .219	Work Role Scale
Environmental Variables:	Sexual Satisfaction
N ^a = 1157	Financial Problems
Statistically Significant Predictors: ^b	General Racial Discrimination Scale
Work Role Scale	Sexual Satisfaction
Satisfaction with Living Quarters	Percentage of Variance Accounted for: 12.7%
Financial Problems	Multiple Correlation: .356
General Racial Discrimination Scale	
Sexual Satisfaction	
Percentage of Variance Accounted for: 6.6%	
Multiple Correlation: .257	

^aRespondents included at each stage were those with complete data for all variables.^bListed in order of their contribution to predicting resistance to authority.

Table 9

REGRESSION MODEL FOR PREDICTING RESISTANCE
TO MILITARY AUTHORITY
(N = 1142)

Predictor Ranking	Variable	Partial Correlation
1	Civilian Arrests	.160
2	Military Work Role Scale	-.099
3	Satisfaction with Living Quarters	-.098
4	Social Responsibility Scale	-.089
5	School Expulsions	.082
6	Financial Problems	.077
7	Participation in Team Sports	.075
8	Sexual Satisfaction	.070

Note. Multiple Correlation .346; Explained Variance 12.0%.

PREDICTING GENERAL DELINQUENCY

Tables 10 and 11 show the results of the regression analyses for predicting general delinquency; little was found except that persons who reported committing crimes prior to their entry into the Army also report committing crimes once in the Army. While these data suggest that selecting higher quality prospective military personnel might well involve securing information on their civilian criminal records, one cannot assume that the screening of civilians with criminal records would significantly reduce crime and criminal activities in the Army. Furthermore, data in Marginal Man and Military Service⁹ indicate that levels of combat performance did not appear to differ significantly among convicted felons inducted during World War II and their counterparts with no criminal records. Selection must be tempered with the understanding that, under certain conditions, individuals who were marginal in civilian life perform at required levels within the military.

DISCUSSION

Most prior research on military delinquency has attempted to develop selection and screening instruments to differentiate between the successful and unsuccessful soldier. While the idea that potential troublemakers can be identified before they enter the service is appealing, data do not support the practicality of such an approach. On the basis of over 30 years of research, the best that social and behavioral scientists appear to be able to say about the military delinquent is that (generally speaking) he is young, a high school dropout, has a history of civilian involvement with the law, has had difficulty in holding a job, comes from a broken home, relates poorly to authority figures, and is not very satisfied with his work in the military. Even should the recruiting situation improve markedly--as it has done--the use of these correlates of military delinquency as screening devices is unlikely to significantly improve the state of discipline or significantly reduce delinquency within the Army.

Perhaps a productive approach to minimizing military delinquency might address social and environmental aspects of Army life--for example, insuring that the work assignments of individual soldiers match their respective Military Occupational Specialties; providing meaningful work activities for soldiers both on and off duty; insuring that the training soldiers receive will be directly related to their jobs; improving housing conditions for soldiers and their dependents; even considering whether AWOL, which is called absenteeism in civilian life, should constitute a punishable offense.

⁹U.S. Department of the Army. Marginal man and military service. Washington, D.C.: U.S. Government Printing Office, December 1965.

Table 10
RESULTS OF ANALYTICAL PROCEDURES FOR PREDICTING GENERAL DELINQUENCY

<u>Stage 1:</u>	<u>Stage 2:</u>
Background Variables:	Contribution of personality variables to the regression on background variables:
N ^a = 1014	N ^a = 1305
Statistically Significant Predictors: ^b	Statistically Significant Predictors: ^b
Major Pre-Service Delinquency	Major Pre-Service Delinquency
Civilian Arrests	Civilian Arrests
Percentage of Variance Accounted for:	Percentage of Variance Accounted for:
8.1%	6.7%
Multiple Correlation: .285	Multiple Correlation: .260
Personality Variables:	<u>Stage 3:</u>
N ^a = 1302	Since none of the environmental variables were found to have a significant impact on general delinquency, no Stage 3 test was conducted.
Statistically Significant Predictors: ^b	
Social Responsibility Scale	
Status Concern Scale	
Percentage of Variance Accounted for:	
1.2%	
Multiple Correlation: .110	
Environmental Variables:	
N ^a = 1157	
Statistically Significant Predictors:	
None	

^a Respondents included at each stage were those with complete data for all variables.
^b Listed in order of their contribution to predicting general delinquency.

Table 11
REGRESSION MODEL FOR PREDICTING GENERAL DELINQUENCY
(N = 1320)

Predictor Ranking	Variable	Partial Correlation
1	Major Pre-Service Delinquency	.156
2	Civilian Arrests	.119

Note. Multiple Correlation .260; Explained Variance 6.8%.

The U.S. Army should continue to consider alternatives and changes that improve the quality of the force in the most effective way. Economic conditions aside, an approach for attracting and keeping quality personnel may lie in improving the social-structural components of military service (e.g., leader-follower relationships; job satisfaction; good communication within command structures) as these issues relate directly to an individual's perception of himself and his position within the organization.

REFERENCES

Bauer, R. G., Stout, R. L., and Holz, R. F. Measures of military attitudes. ARI Technical Paper, in preparation.

Berbiglia, J. C. The AWOL Syndrome: A study in the early identification of potential AWOLs by the use of the Taylor-Johnson Temperament Analysis leading to the development of a preventive program. Los Angeles: Psychological Publications, 1971.

Berkowitz, L., and Luttermann, K. The traditionally socially responsible personality. Public Opinion Quarterly, 1958, 32, 169-185.

Berkowitz, N. H., and Wolkon, G. H. A forced choice form of the F Scale free of acquiescent response set. Sociometry, 1964, 27.

Christie, R., et al. An exploratory study of factors affecting transition to Army life. ARI Technical Research Note 13, January 1952.

Drucker, E. H., and Schwartz, E. H. The prediction of AWOL, military skills and leadership potential (HumRRO Tech. Rep. 73-1). Alexandria, Va.: Human Resources Research Organization, January 1973.

Fraas, L. A., and Fox, L. J. The Taylor-Johnson Temperament Analysis "AWOL Syndrome": A further evaluation (Technical report to the Commander). Fort Riley, Kans.: U.S. Army Correctional Training Facility, May 1972.

Ginzburg, E., et al. The ineffective soldier. New York: Columbia University Press, 1959.

Gordon, L. V. Manual for the survey of interpersonal values. Chicago: Science Research Associates, 1960.

Gough, H. G. Systematic validation of a test for delinquency. American Psychologist, 1954, 9, 8-18.

Hauser, W. L. America's Army in crisis: A study in civil military relations. Baltimore: Johns Hopkins University Press, 1973.

Kaufman, W. C. Status, authoritarianism and anti-Semitism. American Journal of Sociology, 1957, 62, 359-382.

Knapp, R. Value and personality differences between offenders and non-offenders. Journal of Applied Psychology, 1964, 48, 59-62.

Kristiansen, D. M., and Larson, E. E. Development of a Background and Opinion Questionnaire for predicting military delinquency. ARI Research Memorandum 67-3. October 1967.

Kruskal, J. B. Nonmetric multidimensional scaling: A numerical method. Psychometrika, 1964, 29, 115-129.

Lang, K. Military organizations. In J. G. March (Ed.), Handbook of Organizations. Chicago: Rand McNally, 1965.

McCubbin, H. I., et al. Leadership and situational factors related to AWOL: A research report. Fort Riley, Kans.: U.S. Army Correctional Training Facility, 1971.

Osburn, H. G., Brown, C., Chreitzberg, J., Hield, W., Seidel, E., and Watson, D. A preliminary investigation of delinquency in the Army. HumRRO Technical Report 5. Alexandria, Va.: Human Resources Research Organization, April 1954. AD 29 029.

Plag, J. A. The practical value of a psychiatric screening interview in predicting military ineffectiveness. San Diego: Navy Medical Neuropsychiatric Research Unit, April 1964.

Quay, H. C., and Peterson, D. R. The questionnaire measurement of personality dimensions associated with juvenile delinquency. Unpublished manuscript, 1964.

Ryan, F. J. Relation of performance to social background factors among Army inductees. Washington, D. C.: Catholic University Press, 1958.

Shepard, R. N. The analysis of proximities: Multidimensional scaling with an unknown distance function. I. Psychometrika, 1962, 27, 125-140.

Shepard, R. N., Romney, A. K., and Nerlove, S. B. (Eds.) Multidimensional Scaling: Theory and Applications in the Behavioral Sciences. Seminar Press, 1972.

U.S. Department of the Army. Marginal man and military service. Washington, D.C.: U.S. Government Printing Office, December 1965.